

REMARKS/ARGUMENTS

In order to expedite prosecution, Applicants have amended claims 1, 15,17, 19, and 25-26. No new matter has been added to these claims. Support for claims 1, 15 and 17 can be found on pages 11 and table I of page 7 and within the specification on pages 7-11 of the specification, respectively.

35 USC 112 Rejection, first and second paragraph

Applicants have amended claims 15 and 17 to overcome the 112 rejections for failing to particularly point out and claim the subject matter and for failing to comply with the written description requirement. Claims 25 and 26 have been amended by removing the term "general" and adding specific claim language from claim 1 to support formulas I and II. Claim 19 has also been amended to more clearly define the invention.

Additionally, claims 1, 4-7, and 9-28 under 35 USC 112, first paragraph are rejected because the specification does not provide enablement for any or all the iodonium salt and fluoridation in claim 1 and compounds with diverse structure embraced in claims 15 and 17. Applicants respectfully disagree. The Office continues to maintain that the claims recite "fluoridation of any iodonium salt" (last paragraph on page 4 of the OA), which Applicants addressed in their previous response so that the claimed method very clearly leads to the desired aryl or heteroaryl.

The Office also continues to object (in various places in the OA) that any reactive groups in the starting iodonium salt may participate in the fluoridation reaction. Applicants have amended claim 1 by inserting the phrase "or protected versions thereof" after the definition of R1-R5 as well as after the definition of the Q substituents. Protecting groups are discussed in the specification in the context of protecting -OH, -NHR and -COOH groups on Q (page 7 line 21), and in respect of the particular iodonium salt precursors of Table I (page 11 lines 2-4). Furthermore, protection of reactive groups is well-known in the common general knowledge of the skilled person as a way to avoid undesired reactions at particular reactive groups.

The Office continues to maintain that the specification is not adequately enabled for fluoridation of iodonium salts covered by claim 1. Applicants respectfully submit that the invention covers a well-known strategy for radiofluoridation but wherein the reaction solvent comprises water (prior art strongly teaches towards elimination of water for radiofluoridation). The Office rejects this argument that the process of fluoridation of iodonium salts is common general knowledge (with associated Google search results). Applicants wish to remind the Office that the known teachings relating to particular compounds are sufficient for one skilled in the art in that they would view this as a generally-applicable method. The skilled person therefore simply carries out the known method but in the presence of some water in the reaction solvent. There is, therefore, ample enablement in the description for the skilled person to be able to carry out the claimed method.

The Office further points to the variable radiochemical yield shown with the prior art methods and deduces that this demonstrates lack of reproducibility of the present method.

The experimental data presented in the present specification, however, clearly shows that the method of the invention results in comparable, and better yields than compared with the prior art methods.

The Office states that undue experimentation is involved in determining embodiments that are operative. Applicants respectfully submit that the specification shows the method of the invention to be more reliable than that of the prior art; thereby providing a method that involves less experimentation than known methods. Also, the skilled person, desiring to obtain a radiofluorinated aryl or heteroaryl from a starting iodonium salt, simply has to carry out the well-known radiofluoridation reaction in the presence of water to determine whether the method is operative for obtaining that radiofluorinated aryl or heteroaryl. Furthermore, the examples of the present application surprisingly demonstrate that the method works, and for a variety of starting iodonium salts. As the claimed method has been shown to work at all for this selection of iodonium salts, the skilled person would expect that the method would be operative for a wide variety of starting iodonium salts.

In view of the amendments and remarks, hereinabove, Applicants respectfully submit that the instant application and claims are patentably distinct over the prior art. Favorable action thereon is respectfully requested.

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The Examiner is invited to telephone the undersigned in order to resolve any issues that might arise and to promote the efficient examination of the current application.

Respectfully submitted,

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